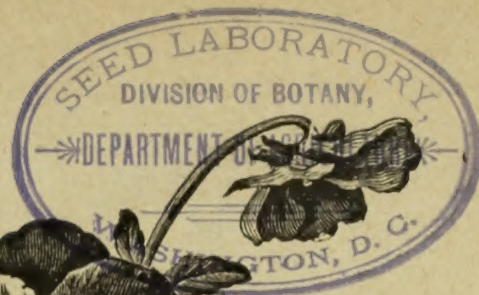


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1896

TOOLE'S CATALOGUE

...AND...

Guide to Pansy Culture



Premium
American
Pansy
Seeds

GROWN BY

WILLIAM TOOLE

PANSY SPECIALIST

BARABOO, WIS.

A Happy New Year

WE WISH to all our friends, and hope the coming season may bring to us a continued increase of friends and customers.

Again we thank kind friends who have recommended our seeds and plants to new customers, and we hope to continue to deserve such good will from our patrons. Our many premiums taken at the leading fairs in the past have earned the name of

Premium American Pansy Seeds.

We endeavor to keep to the highest standard of quality, and of the other kinds of seeds which we do not grow, we get the best to be had.

We are preparing for an increased trade in seeds and plants, and in our greenhouses have a fine stock from which to propagate early plants.

The reduction of express rates on plants has been a great help to this part of our business, as flower lovers can better afford to send for plants.

Our best customers are those who understand raising plants and flowers, and love for flowers increases with knowledge of them. Therefore we especially recommend the following very excellent gardening publications:

Southern Florist (monthly), Louisville, Ky.

Gardening (semi-monthly), Monon building, Chicago, Ill.

American Gardening (weekly), Rhinelander building, New York city.

Baraboo, Wis., January 1, 1896.

How to Grow Pansies.

Extending as our country does through so many degrees of latitude, a wide variation of rules may be made to adapt them to different localities, and as the pansy so readily accommodates itself in many ways to the wants of its admirers there is perhaps no flower grown from seeds which may be successfully planted at so many different seasons. It is well then to consider

WHEN TO SOW PANSY SEEDS.

From southern Illinois northward, if but one sowing is made, most satisfaction may be derived from planting out of doors early in spring. These plants will bloom from midsummer until snow flies, and if properly cared for, give the earliest flowers in spring and an abundance of bloom until summer heat has drawn the branches out so long that they had better give way to younger plants.

South of the latitude above mentioned, it is better to depend on spring flowers from plants started in late summer and early fall, or from seeds planted in the greenhouse or house in January.

Pansies commence to flower in from seventy to eighty days from the time of sowing, under reasonably favorable conditions, and my customers in the extreme south and on the Pacific coast, will thus see that with a fall sowing they may have a long period of flowering before summer heat commences.

In the latitude of northern Illinois and Wisconsin, seeds for plants to winter over should not be planted later than first of September. If plants are desired for winter blooming, sow late in July. Flowers can be had nearly as early from plants started in the greenhouse from middle of January to middle of February, but in the house it would be better not to plant earlier than March, for it is necessary to give the young plants room as they grow, planting out in shallow boxes before they become drawn and slender. If seeds are sown out of doors just before winter sets in, they will come up early in spring and be in flower before July. If these indoor plants are too early for planting out of doors they must be given more room as they grow, and will do better in shallow boxes holding a number of plants, than if grown in pots. In the greenhouse we plant in the benches as if they were long boxes.

SOWING SEEDS.

The same care is required in sowing pansies as for other small seeds. They must not be covered too deeply, nor be permitted to dry after they have commenced to germinate, for a dried plant is dead no matter how small it is.

Pansy seed should be sown thinly in shallow furrows not more than one-sixteenth of an inch deep, made with the sharpened edge of a piece of lath. The seed bed should be mellow and rich, leveled smooth before the seeds are sown, and after sowing the seeds should be covered evenly, and the surface pressed with a piece of board. The seed bed should be watered and shaded until the young plants are up, after which they should be gradually accustomed to full light. Shade for the seed bed may be secured by laying over some kind of frame about a foot from the ground, laths or pieces of sheeting.

As soon as the plants are up the shading must be gradually removed as there is always danger of "damping off" with any kind of small plants in close, warm and damp situations. Too high temperature in the seed bed is fatal to pansy seeds, and those planted in midsummer will not germinate strongly if the

thermometer in the shade ranges for a long time above 75 degrees. If the seeds are permitted to dry after they have sprouted, their vitality is gone. If covered too deeply they cannot come up.

Florists are in the habit of sowing pansy seed under glass which is not necessary, but will answer very well early in spring, but shading with cloth-covered frame is far better in summer, and those who have followed our advice with their August sowing have had much better success than when using hot-bed sash.

WHERE TO GROW PANSIES.

In the house or greenhouse in winter, if young plants are had just commencing to flower late in the fall, if they are not kept too hot and dry and are protected from green fly and red spider. Old plants which have done service in the garden are not suitable for winter blooming. Several plants in a box are better than if grown in earthen pots. On the balcony, porch or window sill in summer, if not directly facing the south. Grown in this way no plant better repays the care given. In the garden anywhere, if not in too hot a place, directly facing the south; nor where they must struggle with larger plants and trees for nourishment.

GENERAL MANAGEMENT.

The plants which have flowered in the spring will do well again in the fall if the long branches are cut back late in June.

The ability of the pansy to stand hot weather depends greatly on its treatment. If the soil is rich enough, and not too dry, nor in too hot a situation, pansies, with frequent cultivation, will stand a long siege of hot weather, if no seeds are allowed to form. With this care, one can have pansies from young plants in midsummer. A rich, sandy loam is best for pansies, and if not too stiff, a clay soil is better than that which is very sandy. But whatever its texture, the soil should be made rich with well-rotted manure, thoroughly incorporated with the soil, and stirred several times while the plants are in the seed bed. This thorough preparation of the soil before transplanting is very important.

Well-rotted manure, if to be had, is preferable to commercial fertilizers, and many who think they can not have a supply, might provide some by making a compost heap as if for a hot-bed, a heap of manure covered with soil only being necessary. After heating and watering for some time the whole mass, including the soil, should be mixed and piled again, any supply of hen manure on hand being included. In this way a good supply may be provided without the offensiveness of the ordinary manure heap.

Transplant after the plants have attained the fourth or fifth leaf and before they have become drawn and slender with crowding. An eastern or northern slope is preferable. My own experience does not permit me to favor shade, although shade is preferable to too much heat, and shade of trees is more objectionable than shade of buildings. Temporary shade during the hottest portion of the day in extremely warm weather would be an advantage, but shade the whole season through will not admit the brightest colors, or an abundance of flowers.

If watering is necessary and possible the ground should be well soaked in the evening and thoroughly stirred, about two inches deep, next morning, as soon as the soil is dry enough.

Cultivation without watering, is better than watering without cultivation.

Keep the buds picked off after transplanting until the plants are well established, and also during very hot weather, for a good display of flowers in the fall.

When growing where they are to stay, about eight inches to a foot square of space should be allowed each plant. Frequent stirring of the soil is necessary between the plants until they are too large.

A crust should never be permitted to form on the surface. Frequent cultivation is, more than anything else, the secret of success in pansy growing.

WINTER PROTECTION.

The plants which have flowered through the summer and fall will usually winter over well if protected with a light covering of leaves or straw which is better if a little brush has been placed over the plants first.

Young plants are quite hardy if protected from sharp winds, and not allowed to become too wet near the surface of the ground. In cold frames a considerable mixture of sand is desirable, as the plants, with protection, winter better in sandy than in clay soil. The young plants should be transplanted from the seed-bed to winter quarters early enough to become well rooted before winter sets in.

Boards may be used instead of glass for cold frame covering; glass should be shaded if too warm, as it is desirable to keep the plants dormant, and they should be watered, if necessary, as the roots will sometimes freeze dry if not looked after.

A good way to protect pansy and other plants is to have a V trough of narrow boards to cover the plants with, and then throw on some coarse litter of leaves, straw, manure or shavings. In all cases thorough surface drainage must be provided to prevent water from accumulating about the plants and forming ice about them.

PANSY PESTS.

Pansies, like many other flower plants, in hot, dry weather, are liable to be injured by the so-called "Red Spider," a minute insect which attacks the under surface of the leaves of many garden and field plants, causing them to wither, as if from dryness. Spraying of water from a garden pump directed forcibly against the plants will reach the under side of the leaves and destroy the insects. The addition of pyrethrum powder, or else kerosene emulsion to the water makes the remedy still more effective.

As the red spider flourishes best in a dry atmosphere, it is often the case that plants in the shade of trees suffer because heavy dews are kept from the plants by the trees. Aphis or plant lice cause more injury in gardens than people are generally aware of. A drenching of weak tobacco tea will remove them.

During close, hot, moist weather, quite large plants will "damp off;" but I do not know of a remedy.

When rain comes after very dry weather, sometimes mildew will attack the plants, such as trouble roses and many other plants. Whenever it appears, whether on pansies or other plants, it may be destroyed by sprinkling with the following: Boil one pound of sulphur and one pound of lime in two gallons of water until it has lost two-thirds by evaporation; allow it to settle and bottle the clear liquid for use. Take one gill of this to four gallons of water and sprinkle to wet the mildew with it.

VARIETIES AND PRICES.

The following list includes all of the leading varieties. Several kinds which I have not in sufficient quantity to offer separately are included in Extra Choice and Selected Mixed. My endeavor is to offer at a low price as good seeds as can be bought elsewhere at any price.

I would be pleased to have my customers grow my pansies by the side of the more expensive seeds, with high sounding names, from other dealers.

Fancy names of mixtures, with glowing descriptions, are no doubt attractive to buyers, but it is thought that the following classification will facilitate selections of varieties to suit various tastes. It is well understood that there is always some variation of colors in the different varieties, no matter how choice the strain of seeds, but even those which vary are equally beautiful with the others, and it is from these that new varieties are produced. Even on the same plants the colors and markings vary with the weather, edgings and markings of lighter shades, which are quite narrow in the fall or spring, are broader in hot,

dry weather, so that the flowers which commence in midsummer do not show the beauty and depth of coloring which the same varieties will attain in the later season.

We are continually making additions to our pansies in variety of shades and markings, and while for convenience of classification the old variety names are retained, yet each year we have new surprises in beautiful combination of colors.

No.	PRICE.
1 Deep Blue—varying from bright to very dark blue.....	\$0.10
2 Blue Black Shaded—black in center, changing outward to shades of blue.....	10
3 Light Blue—delicate shades of light blue or lavender.....	15
4 Nos. 1, 2 and 3 mixed.....	10
5 Uncle Tom—my own strain—the deepest black of pansies.....	15
6 Black—violet center.....	15
7 Black—bronze center.....	15
8 Nos. 5, 6 and 7 mixed.....	15
9 Havana Brown—attractive shades of light brown, old gold, etc....	15
10 Velvet Brown—very rich and velvet dark brown shades.....	15
11 Brown and Bronze—dark mahogany shades with bronze center....	15
12 Bronze—varying from light bronze to copper hue.....	15
13 Nos. 9, 10, 11 and 12 with other shades of brown; mixed.....	15
14 Fancy Red—reddish shades of purple from rosy to almost crimson. This variety originating with myself is in all respects the best red pansy.....	15
15 Rose—a new variety of my own and quite distinct from any other, with light shades of pink to deep rose, and carmine purple, with rich velvety centers and frilled edges.....	15
16 Purple Mantle—deep maroon to reddish shades of purple with light tinge near the edge of petals.....	15
17 Velvet purple—rich, dark shades of royal and violet purple.....	15
18 Mixtures of Nos. 14, 15, 16 and 17.....	15
Marbled—beautiful combination of colors on white or yellow ground:	
19 Marbled White Ground.....	10
20 Marbled Yellow Ground.....	10
21 Marbled colored, upper petals edged with white, lower petals marked with yellow.....	10
22 Marbled dark.....	10
23 Marbled mixed.....	10
24 Fiery Purple—very rich velvet shades, with bright yellow edging...	15
25 Mixture of Nos. 19 to 24 inclusive.....	10
28 Large English.....	10
30 Rosy Lilac—flowers varying from pale lilac to darker shades.....	10
31 Striped Bronze Ground.....	10
32 Striped Lilac Ground.....	10
33 Striped Mixed—flowers beautifully and curiously marked, with lilac, bronze and yellow on purple.....	10
34 Nos. 28 to 33 mixed.....	10
35 Snow Queen—pure white with characteristic yellow dot in center of flower, sometimes marked near center with faint blue or purple lines.....	10
36 White Penciled—much like Snow Queen with blue or purple lines near center of flowers.....	10
37 White, Large Center.....	10
38 White Blue Edge.....	10
39 White Violet Spotted.....	10
40 Nos. 35 to 39 inclusive.....	10

Odier or Five Spotted.—While other pansies have center markings only on three lower petals these marks are shown on all petals in this variety:

44	Odier Mixed	15
	Large Spotted—very large, rich center marking in great variety:	
45	Large Spotted White Ground.....	15
46	Large Spotted Yellow Ground	15
47	Large Spotted Red Ground.....	15
48	Large Spotted Mixed..	15
49	Cassier or Giant Odier—More after style of Large Spotted than Odier, but an interesting new variety.....	15
50	Mixture of Odier, Large Spotted and Cassier.....	15
51	Emperor William—blue with large dark center.....	15
52	Lord Beaconsfield—dark purple, shading to lavender	15
53	Wm. Penn—a new variety, light drab, shading to brown or pearly gray.....	15
54	Nos. 51 to 53 mixed.....	15
55	Gloriosa Perfecta or Rainbow—beautiful markings with rich steel blue shading over the colors. Some with white, others with white and crimson edges	15
56	Black with crimson and yellow edge.....	15
57	Black with crimson and white edge.....	15
58	The two preceding are very beautiful and striking. Both varieties mixed	15
59	Silver Edge—Violet with pure white edging.....	15
60	Purple White Edge—much after the style of Silver Edge, but quite distinct.....	15
61	Nos. 55 to 60 mixed. Fancy bordered varieties mixed.....	15
62	Deep yellow—no yellow flower grown is more attractive than the yellow pansy.....	15
63	Pale Yellow—delicate canary color.....	15
64	Yellow, large center	15
65	Sunshine or Goldelsie. Some pure yellow without other markings, while on a few plants the flowers are penciled with lines of black or brown near the center	15
66	Yellow blue edge	15
67	The preceding yellow varieties mixed.....	15
68	Blue shaded with brown—interesting colors	15
69	Veined—marking curious.....	15
	Giant Trimardeau. The flowers of this class average larger than any other. The colors and markings are various. Very noticeable.	
70	" Yellow. Flowers very large, bright yellow, with black or brown velvety centers	15
71	" Purple	15
72	" Beaconsfield	15
73	" Emperor	15
74	" Blue	15
75	" Black	15
76	" White.....	15
78	" Trimardeau. The preceding and other Giant varieties mixed	15
80	Extra choice mixed. This is my premium collection mixed.	
81	Selected mixed, selected from plants typical of their respective classes.	
82	Hesperian Pansies. A selection of the most beautiful varieties noticeable for large size and perfection of form and coloring intended for those who wish to grow a few of the very best; in pkg. and trade pkg. only; pkg., 25c.; trade pkg., 50c.	

	Pkg.	Trade Pkg.	1/8-oz.	1-oz.
Extra Choice Mixed.....	10c.	20c.	50c.	\$3 00
Selected Mixed.....	15c.	30c.	75c.	4 50

Trade packages contain about 1,000 seeds; 1/2 ounce at ounce rates. For \$1 order packages to amount of \$1.20; for \$2 order packages to amount to \$2.50. Trade packages of mixed varieties only. The above discount applies to seeds in packages, but not to seeds by weight or trade packages.

The same discount for other seeds as for pansy seeds.

PANSY PLANTS.

My trade in pansy plants is now very extensive with both amateurs and dealers. Orders will be filled promptly as early as spring opens.

Plants sent to all parts of the country, whether by express or mail, have been reported received in splendid order.

The plants when received, whether by express or mail, should be taken to the cellar, or some other cool place, and unpacked at once. The roots should then be sprinkled with water and covered with fresh soil, planting them out in the evening or early in the morning. The bed should have been prepared some time previously, the surface being stirred frequently. The plants, with watering and shading may then be safely planted even in dry weather.

Plants delivered at express office here well packed to go long distances.

In bud or blossom, from selected seed, 50 plants, \$1.00; 100 plants, \$1.75; 1,000 plants, \$15.00; 500 plants at 1,000 plant rates. Plants once transplanted, by mail, postpaid, 25 cents per dozen. Pansy plants for the south ready after September 1st, from seed bed or once transplanted, by mail, postpaid, 25 cents; \$1.60 per hundred. Larger plants by express in fall at same prices, not prepaid.

Not less than one dozen plants by mail. If less than \$1.00 worth of plants are ordered by express five cents must be added to remittance for basket.

The above prices are for mixed varieties, but if many plants of any one variety are ordered, ten per cent. will be added to the regular price of such plants.

There is an advantage in club orders if sent to one person, not only by lower rates for plants, but also through proportionately less express charges if all are consigned to one person.

In club orders each person's collection will be marked separately, and some extras sent to the person making up the order.

For list of other plants see end of catalogue.

Other fflower Seeds.

SOME DIRECTIONS FOR CULTURE.

Nearly all flowering plants bear transplanting, thus giving opportunity to care for starting seeds much better than can be done in the open garden. A bed three feet eight inches wide and any length desired, should be made and enclosed with a six inch board on the south side, and one twelve inches wide at the back or north side.

Cover with square frames of lath four feet long and three feet wide, to which are tacked pieces of a light quality of unbleached sheeting. Under the shade of these covers we can secure the right degree of moisture to insure germination and after plants are up they can be gradually accustomed to full sunshine, but be very careful about removing covers when the air is very drying. Very small seeds may be started in boxes covered with panes of glass, and all then placed under the covers.

ASTERS.

The same directions given for care of pansies in seed bed will apply to asters, except that the latter may be covered a little deeper. Seeds may be sown from the time frost leaves the ground until late in May. Plants started in May will be ready for the fall fairs. Make the soil into which they are transplanted rich, stir the surface frequently and mulch before they begin to bud.

Asters, when in bloom, should not suffer for want of water. They are fine, grown in pots for decorative purposes. When the plants are in full bloom out of doors they may be lifted with some soil about the roots and placed in a bowl or tumbler of water with a little moss in the bottom. They will thus keep in condition longer if removed to the house for decoration than they would if exposed to the weather in the garden.

With so much need for white flowers none are more useful than white asters. These, with the lighter shades of purple, blue and rose or pink, are very much used for decorative work. A choice selection of these colors, in the best varieties has been chosen for customers.

101	Porcupine or needle.....	\$0.10
102	Crown or Cocardeau. Of various colors with white center	10
103	Reid's improved quilled.....	10
104	Imbrique Pompon. Flowers small, very regular in form, in great variety of colors and profuse bloomers, continuing in bloom for a long time.....	10
105	Pæonia Flowered Perfection. Flowers large, globular, free blooming, and in great variety of shades	10
106	Pæonia Flowered, white.....	10
107	Rose Aster. Flowers medium large, in great variety of colors, very double and free blooming, durable and satisfactory for decorative purposes.....	10
108	Rose Aster, white.....	10
109	Rose Aster, light carmine.....	10
110	Rose Aster, light violet.....	10
111	Rose Aster, scarlet, the brightest colored aster; very showy.....	10
112	Washington, Aster of the Rose and Victoria class, having probably the largest flowers of any aster, mixed colors.....	10
113	Washington Aster, white.....	10
114	Goliath Aster, flowers very large and showy, with long stems.....	10

115	Harlequin Aster, of various shades speckled with white.....	10
116	The preceding tall varieties mixed.....	10

HALF-TALL VARIETIES.

119	Comet, a new variety attracting much attention because of resemblance to Japanese Chrysanthemums, colors mixed, shades of bright pink, light rose, lilac and white striped.....	10
120	Queen of the Hall, a new variety, half tall and earliest of all the asters, flowers of medium size on long, slender stems, white, rose, deep blue, crimson, colors separate or mixed.....	10
121	Diamond; the flowers of this variety are the largest of the pompon class, very regular in form, rivaling the dahlia in symmetry, mixed colors	10
122	Diamond, white	10
123	Diamond, light blue	10
124	Diamond, rose color	10
125	Pearl. Flowers also of the pompon class, very freely blooming and desirable, a most durable variety, mixed colors.....	10
126	Pearl, white.....	10
127	Pearl, white and rose	10
128	Pearl, light blue and white	10
130	Meteor. Flowers in variety of colors, plants branching very full of flowers and showy	10
131	Victoria. Flowers of good size and variety, free blooming and desirable mixed colors	10
132	Victoria, white	10
133	Lilliput. This might be called pompon needle, flowers very neat and attractive	10
134	Mignon. Pure white, a new variety with soft petals, very free blooming and desirable to fill in designs or other decoration work	10
135	Half-tall varieties mixed	10

DWARF VARIETIES.

137	Dwarf Chrysanthemum Flowered. Plants dwarf, branching free blooming	10
138	Humboldt. Flowers large, plants branching, broader than high and covered with flowers	10
139	Shakespeare. Plants low growing, branching and covered with very small double flowers.....	10
140	Pæonia Flowered Dwarf Bouquet. More erect in style of growth than preceding dwarf varieties. Plants one mass of flowers, almost completely hiding the foliage	10
141	Dwarf Victoria. Many colors mixed.....	10
142	Dwarf Queen. White	10
143	Dwarf Queen. Carmine	10
144	Dwarf varieties mixed	10

OTHER MIXTURES.

To accommodate the large demand for asters for decorative work we offer for florists' use a mixture of best white with light blue and pink, or carmine shades as:		
146	Florists' Mixed.....	10
And for the same uses we offer a mixture of the best white varieties.		
147	Mixed Whites.....	10
148	All varieties and classes of asters mixed	10
Trade pkgs. containing triple quantity at double price, of the following numbers, 116, 135, 144, 145, 146, 147, 148.		

AGERATUM.

Plants susceptible to frost but otherwise easily grown. Flowers in clusters. Free and continuous bloomers.

The dwarf varieties are fine for house plants.

155	Imperial Dwarf White	\$0.05
156	Imperial Dwarf Blue	05
157	Tall Blue	05

ALYSSUM.

Flowers white, small, numerous and sweet scented, valuable for ribbon beds or where masses of white are wanted: blooms early and late.

160	Common, best for cutting	\$0.05
161	Dwarf, best for edgings	05

ANTIRRHINUM.

165	Or Snap Dragon—Dwarf, easily grown from seeds and very desirable for bouquets or in the garden; mixed colors	05
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COREOPSIS.

169	Drummond's golden wave, clear, bright yellow	05
170	Bicolor—A bouquet is not complete without some yellow, and the Coreopsis is indispensable for cut flowers	05
171	Dwarf varieties mixed	05

COSMOS.

Tall branching plants with great abundance of flowers late in the season, like single dahlias on long slender stems, in great variety of shades from white through pink and crimson to dark purple and maroon. Much used by florists late in the season.

176	Pink and red shades	\$0.10
177	White Pearl, pure white	10
178	Mixed Colors	10

DIANTHUS.

Free and continuous bloomers from pure white, through rose, carmine, crimson and brightest red, to almost black; the Japan Pinks commend themselves to every one.

180	Chinensis Heddewiggi—Double mixed colors	\$0.10
181	Albo Marginatus—Mourning Pink, very dark and velvety with white border	10
182	Laciniatus—Double fringed, mixed	10
183	Albus—Double white	10
184	Diadematus—Diadem Pink	10
185	The preceding varieties mixed	10
186	Barbatus—Sweet William, most beautiful colors mixed	05
187	Marguerite Carnations. These if sown early will blossom the same season. They are very free bloomers and more than three-fourths come double from seed, being in as great variety of colors and fragrant as the common carnations. Pkt. 10c; trade pkt., 20c.	

GAILARDIA, OR BLANKET FLOWER.

190	Gailardia Lorenziana—Double mixed, splendid plants for bedding or bouquets, easily grown, flowers large and continuous bloomers, until late in autumn. Colors, yellow, claret, maroon, brown, crimson and yellow, etc.	\$0.05
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GODETIA.

Godetia—Very handsome annuals about one foot high, of dwarf compact growth, bearing large, handsome flowers of exquisite satiny shades, in great abundance. A bed of them, or a single plant, is one mass of color. Fine, also, for pots and window boxes.

- 192 Finest mixed..... \$.05

IBERUS, OR CANDYTUFT.

- 194 Candytuft—mixed colors.. 05

IPOMEA.

- 195 Ipomea Purpurea, Morning Glory, ten colors mixed..... 05
 196 Ipomea Quamoclit, Cypress vine, white, scarlet or both colors mixed 10
 197 Ipomea Quamoclit, Ivy leaved, scarlet flowers in clusters blooming early, profusely and continuously. One of the best of the Ipomeas 10

LARKSPUR.

The flowers of both annual and perennial varieties are fine for cutting, and showy in the garden; perfectly hardy and of easy culture. The perennial variety will bloom the first season, and for many years after. There is no blue flower brighter than are some of the Chinese Larkspur.

- 200 Double stock flowered, mixed colors..... \$.05
 201 Chinese perennial, white or bright blue; either color separate..... 05
 202 Chinese in many shades of white, blue, purple mixed..... 05

LATHYRUS ODORATUS, OR SWEET PEA.

- 206 Emily Henderson, a grand white..... 10
 207 Queen of England, pure white, large flowered, free bloomer..... 05
 208 Apple blossom 10
 209 Cardinal, light scarlet..... 10
 210 Butterfly, white and lilac or mauve..... 05
 211 Princess Beatrice, bright carmine rose..... 05
 212 White 05
 213 Fairy Queen..... 05
 214 Grand Blue, dark purple..... 05
 215 Invincible Striped 05
 216 Invincible Scarlet..... 05
 217 Blanche Ferry, a dwarf, free blooming, variety flowers, bright pink and white, large on long stems..... 05
 218 All varieties mixed, 1 oz. 10c., pkt..... 05

NASTURTIUMS, DWARF.

- 222 Empress of India, very dark..... 05
 223 Lady Bird, yellow, spotted scarlet..... 05
 224 Pupureum, crimson..... 05
 225 Pearl, creamy white..... 05
 226 Rose..... 05
 227 King of Tom Thumbs, scarlet..... 05
 228 Golden King, bright yellow..... 05
 229 Dwarf varieties, mixed..... 05

NASTURTIUMS, TALL.

- 230 Crimson..... 05
 231 Yellow..... 05
 232 Rose..... 05
 233 Scarlet..... 05
 234 Orange 05
 235 King Theodore, very dark red..... 05
 236 Many tall varieties mixed..... 05

PETUNIA HYBRIDA, GRANDIFLORA.

This class of flowers is so well known that they need no special description. Seeds should be sown in boxes sprinkled on the surface of the soil and pressed in. They should be carefully watered and shaded with a pane of glass, muslin or paper, or they may be covered with a woolen cloth laid directly on them, the watering being allowed to soak through the covering. As soon as the seeds have sprouted remove the cloth, but do not let the plants dry out or keep them so close as to cause damping off. The fringed petunias are very attractive and are admired even by those who have not cared for petunias until seeing these beautiful varieties. The Fringed and Superbissima varieties have attracted much attention in my exhibits at Minnesota and Wisconsin State Fairs. Some flowers of the Superbissima class were five inches across in various colors, with black, white and yellow throats and frilled edges.

Petunias are splendid house plants for either winter or summer blooming and if cut back occasionally will continue to grow and flower for several years, but it is easy to renew the single varieties from seed.

240	Belle Etoile, <i>Beautiful Star</i> , flowers crimson, with large white stars in center, very showy in masses.....	\$0.10
241	Fringed Alba, white	15
242	Fringed Maculata, or spotted.....	15
243	Fringed Veined.....	15
244	Fringed Kermesina, rich crimson maroon.....	15
245	Fringed Mixed.....	15
246	Petunia Grandiflora, flowers very large and in a variety of colors and markings	10
247	Superbissima Alba, white, 100 seeds.....	15
251	Superbissima Quadricolor, yellow throat.....	15
252	Superbissima, many varieties mixed.....	15
253	Large flowered and fringed, double mixed, 100 seeds.....	20

PHLOX DRUMMONDII.

One of the most showy and free blooming annuals. Seeds may be sown early with about the same care as for Asters, but like Petunias, the soil need not be so rich.

The Grandiflora varieties are strong growing with large flowers.

The Hortensifloras are compact, bushy growers, with flowers larger than the common varieties.

260	All colors mixed.....	\$0.05
261	Meteor, bright scarlet.....	05
262	White	05
263	Hortensiflora, white	05
264	Hortensiflora, rose.....	05
265	Hortensiflora, mixed.....	05
266	Grandiflora, mixed.....	05
267	Grandiflora, white.....	05
268	Grandiflora Splendens, bright crimson with white center.....	10
269	Star of Quedlinburg, each petal has a long point in variety of colors and very pretty.....	10
270	Fringed. These have fringed edges, mixed colors.....	10
271	Star and Fringed, mixed	10

RESEDA ODORATA, OR MIGNONETTE.

For fragrance and free blooming qualities the three following varieties are offered as the best:

272	Parson's white.....	\$0.05
273	Miles Spiral, long spikes.....	05
274	Matchet, dense compact growth	10
275	Mixed varieties.....	05

STOCKS.

For fragrance and beauty combined, the ten-week stocks are much esteemed. They should be started early in window or hot bed, but they will bloom in good season if sown as recommended for pansies. A light, rich soil suits them best. Stocks, Alyssum and other plants belonging to the cabbage family suffer from attacks of the flea beetle. The plants should be dusted with a mixture of one part pyrethrum powder to forty parts land plaster. Coal ashes or dry road dust may be substituted for plaster. The California grown pyrethrum called Buhach is the best.

276	Large flowered tall, ten weeks, mixed.....	\$0.10
277	Large flowered, dwarf, pyramidal, ten weeks, mixed.....	10
278	Perpetual flowering, white.....	10

VERBENA HYBRIDA.

Seedling Verbenas are more free blooming and fragrant than those from cuttings, and if seeds are sown in the house, may be had in bloom as early as desirable for our season. They come reasonably true to color from seeds.

284	Mammoth mixed.....	\$0.10
285	Grandiflora Auricula, flowered, mixed colors, with white eye.....	10
290	Candidissima, pure white.....	10
291	Defiance, brilliant scarlet.....	10
292	Deep Blue, with white eye.....	10
293	Scarlet, with white eye.....	10
294	Italian, striped.....	10

SUNFLOWER.

305	Miniature Sunflower. Helianthus Cucumerifolus quite distinct from all other varieties of annual sunflowers. Plants about three feet high and as many broad, covered all the season with small flowers on long wiry stems.....	\$0.05
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POPPY.

Sow early, cover lightly and do not let the seeds dry out. Poppies do not transplant as well as some other plants, and do well sown where they are to stay, thinning to six or eight inches apart.

310	Ranunculus flowered, mixed.....	\$0.05
311	Pæonia flowered, mixed.....	05
312	The Shirley, mixed.....	05

The same premium allowed on other seeds as for pansy seeds.

Plant Department.

The selection of varieties for our plant list has been made with reference to their fitness for out-door growing, window boxes in summer, veranda boxes, and vases without regard to their usefulness as winter houseplants also. We find that many things which formerly were classed only as greenhouse plants are fine for summer growth, either outside of the window, in the garden, or as climbers by the porch. For a summer climber there is nothing finer than *Cobea Scandens*. We have grown *Solanum Jasminoides* for years, but only learned the past season how valuable it is as a summer climber near the house, yielding its clusters of white flowers in abundance, and remaining green after everything is killed with frost until real wintry weather comes.

SEEDLING PLANTS IN VARIETY.

In this department we seem to supply a long felt want, and have been surprised at the great demand for seedling plants for bedding purposes. Many do not care to trouble with seed sowing, others order a few to fill vacancies, or of such varieties as they cannot start early.

These plants are all much earlier than can be started out of doors. We have increased our facilities for growing and hardening off the plants, and our large mail and express trade is steadily increasing.

Seedling *Verbenas* are healthier, more fragrant and free blooming than those from cuttings. Prices as follows:

Asters, in white, pink, light blue, bright red, deep purple, each color separate or in any variety in mixture as listed among such seeds, per doz	\$0.15
<i>Ageratum</i> dwarf or tall, <i>Alyssum</i> , <i>Candytuft</i> , white or mixed, <i>Phlox Drummondii</i> , Japan Pink, Snap Dragon, Parsley, fern leaves, per doz	15
Chinese Larkspur, hardy perennial, blooming the first season, white, blue or mixed, per doz.....	15
<i>Chrysanthemum Inodorum</i> , a hardy perennial, blooming the first season with feathery foliage and double white flowers after style of double feverfew but more graceful, a few plants come single or semi-double, per doz	25
<i>Godetia</i> , either white or mixed colors, per doz.....	25
Sweet peas, transplant readily, mixed colors, scarlet, pink or white, per doz	25
<i>Nasturtiums</i> , dwarf or tall, mixed colors only, per doz	25
Ten Weeks stocks, white, crimson or mixed, per doz	25
<i>Petunia</i> , fringed or superbissima, or both varieties mixed, per doz	25
<i>Petunia</i> , double from seed, not more than 20 per cent., come double, per doz.....	25
<i>Zinnia</i> , double, crimson, white or mixed, per doz.....	25
<i>Salvia Splendens</i> , 5c each, per doz.....	50
<i>Cobea Scandens</i> , a rapid growing hardy climber, with large showy flowers, blue, 5c each, per doz	50
<i>Verbenas</i> , in separate colors or varieties, only as described in seed list, per doz.....	25
English Daisies, white or pink, per doz.....	25
Marguerite Carnations. This new class of carnations has proved very satisfactory, blooming as they do the first season from seed they are more thrifty and free than the old style florists' carnations and equally fragrant. A large percentage come double and some of the most choice can be potted for blooming in the house, per doz.	30
<i>Cosmos</i> . We omitted this last year because blooming so late no matter how early started, but so many people order it we list it again and will try California seed expecting it to be some earlier, per doz	30
<i>Lantana</i> Seedlings, flower early the first season and are beautiful for the garden or in pots, vases, etc., per doz.....	30

Plants from Cuttings.

These are necessarily dearer than plants from seed because much room is taken up in the greenhouse with stock plants of the varieties to be propagated, but if we would be sure of varieties many kinds must be increased in this way.

	Each.	Doz.
Double Alyssum, fine for window boxes, vases, etc., always in bloom and fine for cutting.....	5c.	50c.
Double Alyssum, new giant. This is a stronger grower than the preceding and better for cutting purposes; both are graceful drooping plants ...	5c.	50c.
Feverfew, double white	5c.	50c.
Forget-Me-Not, <i>Heavenly blue</i> ; perfectly hardy in winter but easily lost in summer if neglected	5c.	50c.
Pineapple Salvia— <i>Salvia rutilans</i> . The leaves of this salvia have a strong pineapple fragrance. Plants may be grown in pots, or potted in late summer for winter blooming. The long spikes of crimson flowers are very showy.....	5c.	50c.
Festuca Glauca, <i>blue fescue</i> . This pretty grass is fine for edgings in gardens, window boxes, or vases	5c.	50c.

Petunia Double—Snow Drift, white; Pink Beauty, lovely pink; Aurora, crimson; Argus, crimson and white; Elfreda, carmine, rose and white, 10c. each; 3 for 25c.

Heliotrope—We have tested many varieties the past season and find some of the older varieties the most free bloomers, but some of the new kinds have special qualities to recommend them. Some kinds are different only in name, so were rejected. We offer the following as the best: Queen of Violets, very dark with white eye; Florence Nightingale and Jersey Beauty, medium shade and very free bloomers; White Lady, nearer approach to white, good grower, free bloomer; Albert Deleaux, variegated foliage, medium color of flowers; Madam Carrier, fine trusses nearest approach to blue dwarf; La Renomme, very large trusses of medium dark flowers with white eye; Picciola, tall strong grower with good sized trusses of flowers, more nearly red than any other variety; Mirelle, pale lavender quite distinct, 10c. each; 3 for 25c.

Geranium, Rose Scented are fine for summer use if grown in the garden, and like Heliotrope should be in every outdoor collection. Either skeleton leaved or common; 10c. each; three for 25c.

Lemon-scented, rare and delightfully fragrant; 10c. each; three for 25c.

Lemon Verbena—*Aloysia citriodora*, a general favorite easily grown; 10c. each; three for 25c.

Mexican Primrose. These plants bloom profusely in the summer and are fine for window boxes or in the garden; 5c. each; doz. 50c.

Solanum Jasminoides. A beautiful summer climber for the porch or in window boxes; 10c. each; three for 25c.

Cuphea Platycentia—*Cigar Flower*. Always in bloom winter or summer and pretty in a window box collection; 5c. each; doz. 50c.

Mannettia bicolor. We like this pretty climber very much in plant boxes or growing against the house where it can twine; 10c. each; three for 25c.

Poet's Ivy. This form of English ivy has smaller leaves than the common variety and is very pretty and graceful; 10c. each; three for 25c.

Hanging Basket Fern—*Nephrolepis Exaltata*. We have had wonderful success with this fern grown in a hanging basket built of sticks, log cabin fashion,

and lined with sphagnum moss or any thing to keep the soil from sifting through. Young plants from the old one grow through the sides, and the fronds three to four feet long on large plants are always admired. Leaf mould, with a little well rotted manure, suits them best. Our common white cedar fence posts are easily cut and split into suitable pieces for building plant baskets. Plants, 15c. each; small plants, 10c.; large plants, 20c.

Umbrella Plant.—*Cyperus Alternifolius*. These favorite plants are easily grown in pots as aquatics or in the garden; they like plenty of moisture; thrifty young plants 5c. each; larger plants 10c.

Lantanas are very free bloomers all summer and give a combination of shades different from any other varieties, Javoli pure white, Rigolette shading to deep rose; Jacques Minot, yellow shading to bright orange; Francine rosy lilac dwarf. A Claveau soft yellow shading to rose dwarf; Amiel reddish orange and yellow dwarf; 10c. each; six for 50c.

Strawberry Geranium—*Saxifraga sarmentosa*—easily grown and a beautiful basket plant; 5c. each; six for 25c.

CHRYSANTHEMUMS.

Chrysanthemums for fall blooming. These are easily grown through the summer either in open ground to be potted late in August or they may grow on in pots placed in a trench the depth of the pots, with a board under them to prevent roots striking through the bottom of pots. Never let them suffer with too much or too little water. Pinch back to make bushy plants, and later leave only three buds to each branch for good flowers. While plants are hardy, frost injures the buds causing imperfect flowers. Bring into the house before much fire is needed that they may become gradually accustomed to change.

We are much pleased with the following list of varieties:

WHITE.

Miss Kate Brown, very early, white, good; Ivory, early, large globular flowers; Queen, a beautiful incurved variety, flowers very large, midseason; Niveus, large flowers, one of the best midseason; Mrs. E. D. Adams, long twisted petals; Therese Rey, large incurved, late; Christmas Eve, very late, free bloomer.

PINK.

Vivian Morel, tall, free bloomer, very good; Ed. Hatch, pink, shading to white in center; Harry Balsley, soft flesh pink; Mrs. Payne, pink, shading to yellow, large flowers; Lillian Bird, long needle petals, large flowers, bright color but late.

RED.

Chas. Canfield, bright red, reverse silvery; Cullingford, nothing brighter among reds.

G. W. Childs, one of the best, fine form; M. Freeman, another good one; J. Shrimpton, one of the best among dark reds.

YELLOW.

Mrs. J. G. Whillidin, very good early; W. H. Lincoln, large flowers mid-season, very good; Harry May, deep yellow and old gold; Kioto, incurved waxy yellow; Eugene Dailehouse; one of the very best yellow flowers, large, incurved, a clear, bright yellow.

OTHER SHADES.

Secretary Farson, bronze and yellow; Spaulding, pink and yellow; Tuxedo, golden amber. Price 10c each, 3 for 25c, 14 for \$1.00.

HARDY PERENNIALS.

Achilea Ptarmica—These plants are extremely hardy and very free blooming, having finely divided dark green leaves and covered with pretty double, pure white flowers. We have two varieties.

Achilea—The Pearl.—Stronger growing than the following. Eighteen inches high.

Achilea—The Gem.—An older and more dwarf variety about one foot high. Either variety 10c each, three for 25c.

Helianthus Multiflora—Double perennial sunflower—as beautiful as double dahlias, more free to bloom and more easily cared for. The roots are not always hardy in winter, but a clump of roots may be kept in a box in the cellar through the winter, and if not very wet or dust dry, will keep as easily as potatoes. After they start growing in spring divide the roots, and every sprout will make large blooming plants the same season; 10c. each, three for 25c.

GLADIOLUS BULBS.

We have a fine collection of gladiolus in splendid mixture of shades. Per 12, 40c.; per 35, \$1.00; Postage paid.

SULPHO-TOBACCO SOAP (Rose Brand).

We have tried this insecticide on house plants in various ways and are well pleased with it, having found it very effective in destroying aphids or greenfly, scale lice, mealy bug and red spider. It can be used when fumigation is impossible and is effective on insects which tobacco fumes do not affect. Directions:—Dissolve two ounces of the soap in one gallon of water and sprinkle plants on both sides of leaves using watering can, whisk broom, syringe, force pump or whatever is most convenient for the work in hand. Where scale, mealy bug, and red spider are bad, it is best to apply the wash with a brush directly to the parts affected. Worms in the soil are destroyed by watering with it. This insecticide is equally effective on outdoor plants, also on vermin on animals. Trial 2 oz. package 10c; 6 oz. 25c. post paid.

GENERAL REMARKS.

Read what is said about care of pansy plants when received by mail or express. The same remarks apply to other plants also.

Express rates on plants are now so reasonable it is much better to have plants come that way than by mail. Larger plants can be sent by express easier than by mail and we can afford to be more generous with extras on express orders. We do not fill plant orders of less than 25c. by mail, or less than \$1.00 by express. A dozen may consist of more than one kind of plant at same price. In club orders each one's lot is marked separate and liberal extras given to the one making up the club.

Of miscellaneous plants at dozen rates, select for each dollar to value \$1.10; of 10c. plants, select 13 for \$1.00 or 28 for \$2.00.

We warrant to fill all orders received. If seeds or plants fail to reach you in due season, let us know at once. Money at our risk if you send express order, post office order or bank draft on Chicago, Milwaukee, St. Paul or Minneapolis banks, or any of the large cities. Please do not send your personal checks. Banks refuse them. Small amounts in silver have so far proved safe. Stamps if sent should not be of larger than two cent denomination, one cent stamps preferred. Letters containing bank bills should be registered. As an inducement for our customers to adopt some safe way of sending money we offer where you send express or postoffice order, bank draft or registered letter to value of 50 cents, your choice of seeds to value of 10c. or the same amount in plants with plant orders. Express orders preferred. Make orders plain and separate from correspondence.

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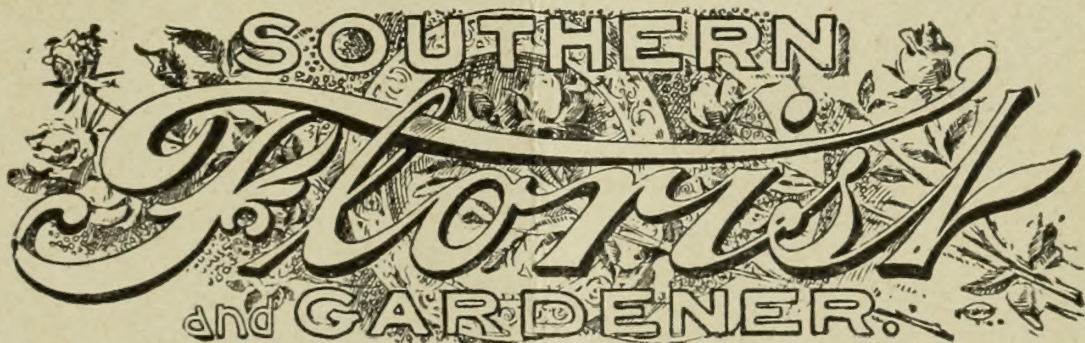
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